

# PATENT COOPERATION TREATY

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## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No  
PCT/DK2004/000720

International filing date (day/month/year)  
20.10.2004

Priority date (day/month/year)  
20.10.2003

International Patent Classification (IPC) or both national classification and IPC  
A01C7/04

Applicant  
BENTLE PRODUCTS AG

1 This opinion contains indications relating to the following items:

- ☒ Box No I Basis of the opinion
- ☐ Box No II Priority
- ☐ Box No III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No IV Lack of unity of invention
- ☒ Box No V Reasoned statement under Rule 43bis 1(a)(i) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement
- ☐ Box No VI Certain documents cited
- ☐ Box No VII Certain defects in the international application
- ☐ Box No VIII Certain observations on the international application

2 **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66 1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220

3 For further details, see notes to Form PCT/ISA/220

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk - Pays Bas  
Tel +31 70 340 - 2040 Tx: 31 651 epo nl  
Fax: +31 70 340 - 3016

Authorized Officer

Oltra Garcia, R

Telephone No +31 70 340-3734



WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/DK2004/000720

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Box No. I Basis of the opinion

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material:  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing:  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form  
☐ furnished subsequently to this Authority for the purposes of search
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/DK2004/000720

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1-17
	No: Claims	1,5,10-17
Inventive step (IS)	Yes: Claims	2-4, 6-9
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-17
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Reference is made to the following documents:

D1: EP-A-0 898 867 (NIPPON BEET SUGAR MFG) 3 March 1999

D2: WO 00/00009 A (BENTLE PRODUCTS AG) 6 January 2000

D3: US-A-4 829 915 (AHM POUL H) 16 May 1989

1. Expressions like "optionally" or "preferably" have no limiting effect on the scope of a claim and any feature following this expression will be regarded as entirely optional. Furthermore, the expression "very inclined main conveyor" doesn't allow the skilled person to establish how much inclination must present a main conveyor according to the invention. Therefore, this term will be interpreted in the light of the description page 11, lines 15-18.

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

- An (optionally self-propelling) machine for bedding out seed or plant tapes (3A, 3B, 7) and including a frame (21, 22, 23), where at least one bedding out unit (10) provided with a plough member (11, 12) is mounted on said frame, said machine further including a carrying pole (25) to be connected to the front of a tractor frame, and where the plough member (11, 12) is associated with a conveyor (56) including at least one continuous belt (73), as well as where the bedding out unit (10) is provided with a supporting plate (26) for at least one supply container (13) for the seed or plant tape (1) to be bedded out in a furrow produced by the plough member (11, 12), wherein the bedding out unit (10) includes a plough member (12), where the top webs of the plough are substantially horizontally projecting stabilising webs (11), and where the conveyor (56) of said plough member is formed by a very inclined main conveyor (see Fig. 10 and column 12, lines 11-16) with two continuous conveyor belts (73) arranged adjacent, but with a mutual, preferably adjustable distance to one another, said main conveyor (56) extending over most of, preferably substantially, the entire length of the plough member (see for example Fig. 2), and that at least two pressure plates (31) are mounted on the rear end of the machine

(see Fig. 3) for pressing down the earth around the seed or plant tape portion which has just been bedded out in the furrow (column 7, lines 7-10).

3. The subject-matter of claim 1 therefore differs from this known machine in that:

- a) the pressure wheels are substituted by pressure plates (31). It is however generally known to the person skilled in the art that this features are equivalents and can be interchanged where circumstances make it desirable (see for instance D2 or D3). The inclusion of this feature doesn't involve therefore an inventive step.
- b) The supporting plate is adjustable with respect to height and/or angle. As it can be clearly seen in figure 3, changing the position of the intermediate portion of frame beams (25) to which frames (22) are connected would change the inclination of the supporting plate (26). So it is possible for the skilled person to adjust the height and/or angle of said plate (26) without the exercise of inventive skills, when circumstances make it desirable. Therefore said plate is indeed adjustable.
- c) The plough member presents a substantially U-shaped cross section and it is of a length (L) of at least approximately 30 cm and a width (b) measured across the U of 15 to 50 mm, preferably approximately 30 mm. The dimensions of the plough member are just a question of adapting said member to the machine and/or its particular use. The skilled person would use a plough member within said ranges where the circumstances make it desirable. Therefore the choice of ranges can not be considered as involving an inventive step. A plough with a U-shaped cross section have already been employed for the same purpose in similar machines, see D2 and D3. It would be obvious to the person skilled in the art, namely when the same result is to be achieved, to replace the plough (12) in D1 with a similar plough as used in D2 or D3.

4. The subject matter introduced by dependent claims 5 and 10 to 17 describe a number of supplementary features of the subject matter of claim 1 which are either known from document D1 or represent minor implementation details which do not add anything of inventive significance, specially as the advantages thus achieved can be readily contemplated in advance.

5. The combinations of features of dependent claims 2 to 4 and 6 to 9 are neither known from, nor rendered obvious by, the available prior art.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

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International application No.

**PCT/DK2004/000720**

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